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JOINT AIR COMMAND AND CONTROL DOCTRINE: A HELP OR HINDRANCE TO THE JOINT FORCE COMMANDER?

by

Leonard E. Troxel

Major, United States Marine Corps

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

14 February, 2005

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Abstract

To complete a comprehensive review of the entire spectrum of Joint Air Command and Control Doctrine would require an in depth analysis of which there is neither time nor space with this work to cover. However, by narrowing the focus of this paper to one overarching topic and its subsequent branches a thoughtful consideration of the larger Doctrinal issues can be initiated. As such, this paper focuses on Joint Air Command and Control (C2) Doctrine and how it applies to the Joint Forces Air Component Commander (JFACC) concept and the subsequent branches of Air Tasking Order (ATO) generation/utilization and Service idiosyncrasies in dealing with the JFACC concept. As an analysis of three recent United States military operations will show (Desert Storm, Allied Force, Operation Enduring Freedom), current Joint Force Air C2 Doctrine is a hindrance to the Joint Force Commander when employing joint air forces within the existing Joint Air Command and Control Doctrine architecture.

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Introduction:

Following the inception of aviation as a weapon of war during World War I, countless discussions and arguments concerning the best way to utilize this flexible asset have kept air theorists, doctrine experts and military commanders busy. The key to the most efficient and effective use of airpower lies within the command and control architecture that is established by the operational (Joint Force) commander.

For the United States, the development of command and control for Joint Air Operations has been one of continuous evolution. From the early days of World War II through Korea and Vietnam, the utilization of aviation assets from each of the services to meet larger operational and strategic objectives has been tried with varying degrees of success. As with other realms of command and control, specifically land and maritime, the goal of air command and control is to facilitate "unity of effort" by all forces involved in order to achieve the given mission. Examples of both success and failure in this department cover the pages of military history books. A quick look at four examples will help set the stage for further discussion of air command and control in the context of joint operations. During World War II, the Battle of Midway demonstrated the United States military's inability to fully understand the uniqueness of joint air operations. This battle was fought by airmen from the United States Army Air Corps (USAAC), the United States Navy (USN) and the United States Marine Corps (USMC) and for the most part encompassed two separate air battles; one fought by land based aircraft and one fought by carrier based aircraft. Even though Midway was an operational success, the coordination of aviation assets was a disjointed mess.[1] The lessons from Midway were not lost on the senior military leaders of the services however. Not long after Midway, the Solomons

Campaign, which lasted from 1942-44, demonstrated what could be done with airpower, whether ship or shore based, when placed under an unselfish and coordinated command architecture. This campaign provides a solid example of what can be accomplished by airmen of different services when mission accomplishment becomes the driving focus and not service issues.[2] Known as the "Cactus Air Force", the joint air component of the Solomons campaign was designed to support operations around the islands of Guadalcanal and Tulagi from both ship and shore based assets. Following a name change to AIRSOLS, the joint service flavor of this air force was highlighted by the fact that a Marine General, Brig. Gen. Roy S. Geiger, was placed in charge of two subordinate commands, one made up of Navy and Marine aircraft and a second made up of Army Air Force and Navy aircraft. A flexible command and control (C2) organization and good staff planning discipline were the keys to the success of this organization and their accomplishment of larger objectives.[3] Following the conclusion of WW II, service parochialism again hampered the development of a joint concept (i.e. doctrine) for comprehensive air command and control. During Korea, the United States Air Force (USAF) played the predominant role of joint air coordinator, but this was more a compromise of necessity than a fix to the problem. The USN successfully fought to keep control of its aircraft, while the Marine Corps came to an "understanding" with the USAF. Despite these obvious service issues, the coordination of airpower during Korea was for the most part successful. This again, much like the conflict with the Japanese during WW II, was due to compromises in the face of a determined enemy, not overall fixes to the problem.[4] As with many things that went militarily wrong in Vietnam, control of airpower was no exception. USN, USMC and Strategic Air Command (SAC) air assets

operated within their own command structures and were not under the overall command of a single air commander. The control and coordination of fixed wing assets alone proved an especially challenging task for the air component commander under the United States Military Assistance Command, Vietnam (MACV), not to mention helicopter operations conducted by both the United States Army (USA) and the Marine Corps. As with Navy and Marine Corps fixed wing assets, USA and USMC helicopter assets worked under their own service command architectures and in their own areas. For MACV's air component commander the best way to sum up the experience in Vietnam was one of confusion and individual service dominance.[5] These four examples provide just a short look at the history of airpower command and control over the last 60 plus years. Despite the tactical successes achieved in all of them, only the Solomon Campaign and Korea, to some extent, point to the use and understanding of what it takes to fully integrate aviation assets of all services to achieve an operational mission. A key point to note from the examples is that the success in utilizing airpower by the United States military was not due to a cohesive doctrine, but to a series of compromises that allowed the larger mission to be accomplished yet still preserved individual service interests. It is precisely this lack of a cohesive doctrine that will be examined in the following pages, utilizing three examples from United States military history.

The focus of this paper is to examine current Joint Doctrine for Command and Control of Air Operations by utilizing the last four major conflicts that the United States has engaged in by using them as a lens through which to focus an analysis of how well our current doctrine allows us to utilize airpower as a powerful and flexible tool. This is not an exhaustive study of the issue, but rather a medium through which a discussion of

how well our doctrine supports our war fighting methods. This work should be viewed as a starting point to continue the ongoing effort to bring effectiveness and efficiency to an ever evolving profession. The issue of whether our current Joint Air Command and Control Doctrine is correct poses a very important question that needs an answer; especially for a nation at war.

Thesis:

To complete a comprehensive review of the entire spectrum of Joint Air Command and Control Doctrine would require an in depth analysis of which there is neither time nor space with this work to cover. However, by narrowing the focus of this discussion to one overarching topic and its subsequent branches a thoughtful consideration of the larger Doctrinal issues can be initiated. As such, this paper will focus on Joint Air Command and Control (C2) Doctrine and how it applies to the Joint Forces Air Component Commander (JFACC) concept and the subsequent branches of Air Tasking Order (ATO) generation/utilization and Service idiosyncrasies in dealing with the JFACC concept. As an analysis of three recent United States military operations will show, current Joint Force Air C2 Doctrine is a hindrance to the Joint Force Commander when employing joint air forces within the existing Joint Air Command and Control Doctrine architecture.

Current Joint Air C2 Doctrine:

Joint Publication 3-56.1 "Command and Control for Joint Air Operations", published 14 November, 1994 provides the "blueprint" for how the United States Military conducts joint air operations within the greater context of the "joint battlespace." Assisting in this task of laying a "floor plan" for joint operations is Joint Publication 3-52

"Joint Doctrine for Airspace Control in the Combat Zone". While JP 3-56.1 sets the stage, JP 3-52 provides more of the "nuts and bolts" of how to go about accomplishing the detailed control of the various types of missions that United States airpower undertakes in the modern battlespace. Both documents are vital to the understanding of what we, the United States military, are trying to accomplish, but it is JP 3-56.1 that this paper will focus on as it lays out the details of the JFACC concept and the associated discussion of the Air Tasking Order (ATO) process.

Before an analysis concerning the effectiveness of current United States Military Joint Air Command and Control Doctrine can be logically conducted, a review of that doctrine is necessary. The following paragraphs are a synopsis of JP 3-56.1 with a specific focus on considerations for Joint Air Operations, the JFACC concept and the ATO process.

"Fundamental principles and doctrine for the command and control (C2) of joint air operations ensure unity of effort for the benefit of the joint force as a whole. Joint air operations are those air operations performed with air capabilities/forces made available by components in support of the joint force commander's (JFC's) operation or campaign objectives or in support of other components of the joint force. The JFC develops a concept of operation and organizes forces based on that concept in order to accomplish the assigned mission."[6] The above quote from JP 56.1 provides the overarching guidance from which the details of Figure 1, below, are derived. Key components of joint air C2 which are detailed in the schematic are the concepts of Unity of Effort and Centralized Planning and Decentralized Execution. Coupling these two concepts are the requirements to be both efficient in the use of limited resources as well need to employ

each platform or agency in the most effective way possible. To accomplish this, a JFC will normally appoint a single officer who will ensure the "unity of effort" for the employment of airpower assets in support of the JFC's mission. This individual is known as the JFACC in current doctrine and it is the JFACC's responsibility to "exploit the capabilities of joint air operations through a cohesive joint air operations plan and a responsive and integrated control system."[7] In order to achieve this, the JFACC has forces made available to him by the JFC who provides these forces by consulting with service component commanders as well as other functional component commanders. (Joint Publication 3-0 "Doctrine for Joint Operations" provides detailed discussion of both service and functional component commanders). In short, JP 3-56.1 again provides the best description of how this takes place. "Component commanders make air capabilities/forces available to the JFC for tasking to support the joint force as a whole. These capabilities/forces are tasked directly by the JFC or by the JFACC based on the JFC's air apportionment decision. Only the JFC has the authority to reassign, redirect, or reallocate a component's direct support air capabilities/forces. Component capabilities/forces not available for joint air tasking must still comply with the airspace control order (ACO) and Special Instructions (SPINS).[8]

The JFC establishes what authority and command relationships that the JFACC will have in order to accomplish the missions, concept of operations and tasks assigned to him by the JFC. These tasks usually include exercising operational control over assigned and attached forces and tactical control over other military capabilities/forces that were made available for tasking.[9] In addition, the JFC may at times establish a supported /

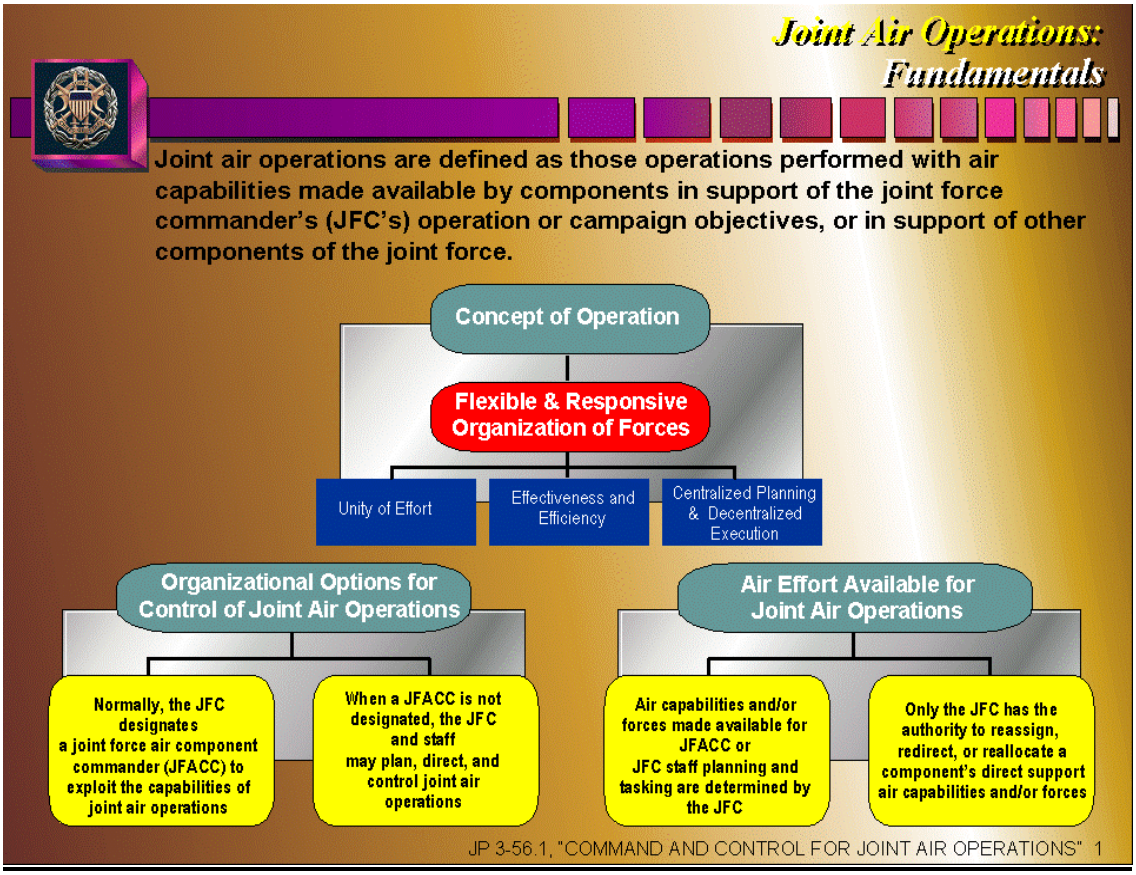

Figure 1. Joint Air Operations Fundamentals
(JFE Briefings CD-ROM Vol 1 No. 1, March 1997, p. 2)

supporting relationship amongst his components. This is accomplished by the issuance of mission-type orders to his components. It is upon receipt of these orders that the authority to conduct operations in accordance with the JFC's intent and concept of operations is received by the components of the joint force.[10] to help facilitate operations Figure 2, below, provides a graphic display of what the roles and responsibilities of the JFACC are as laid out in JP 3-56.1.

The tool that the JFACC uses to effectively coordinate missions and execute both OPCON and TACON of the forces that have either been assigned or made available to him is the ATO. The ATO is both an entity in and of itself, since it is the daily "operations order" that the JFACC issues to his forces as well as to the JFC and his

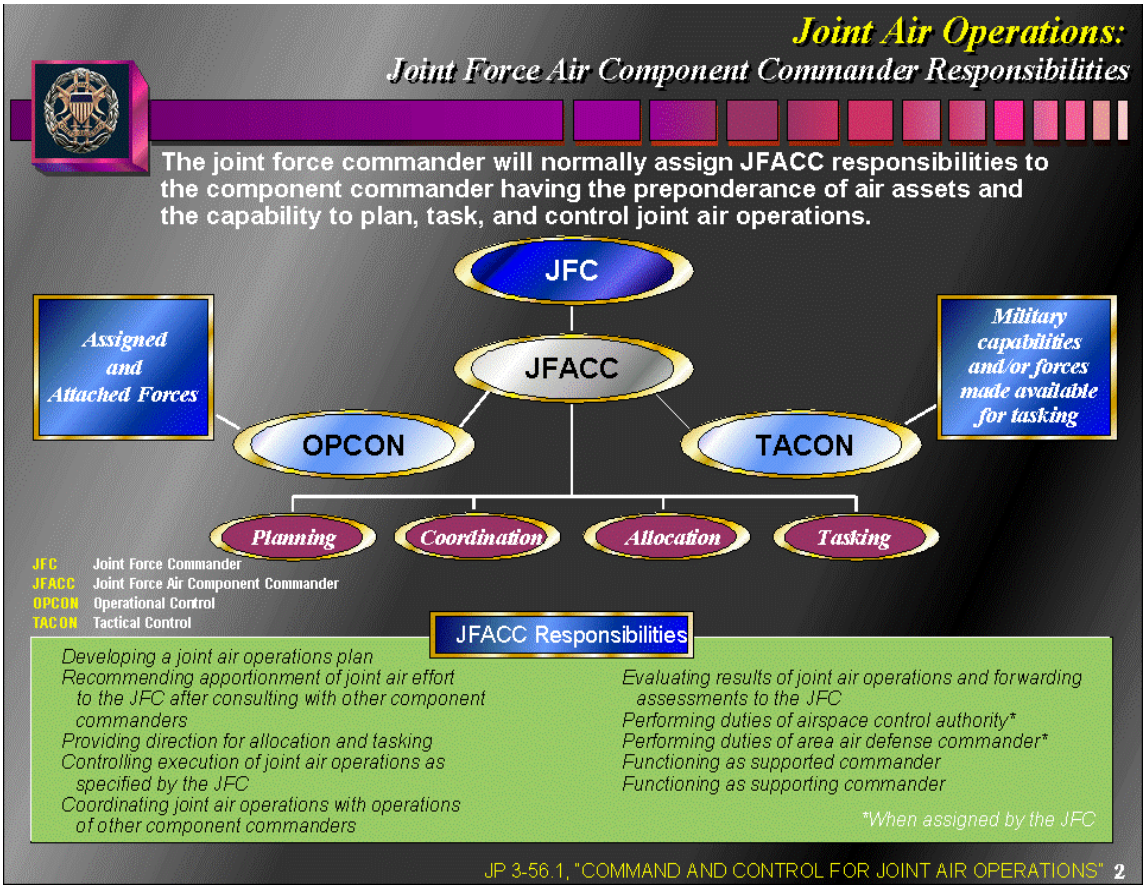

Figure 2. Joint Force Air Component Commander Responsibilities
(JFE Briefings CD-ROM Vol 1 No. 1, March 1997, p. 6)

fellow component and service commanders, but it is also a process through which the JFC's joint air operations plan is implemented.[11] Turning again to JP 3-56.1 the following is the definitive description of the process that the JFACC goes through to produce the ATO. "The joint air tasking cycle provides a repetitive process for the planning, coordination, allocation, and tasking of joint air missions/sorties and accommodates changing tactical situations or JFC guidance as well as requests for support from other component commanders. The full joint ATO cycle from JFC guidance to the start of ATO execution is dependent on the JFC's procedures, but each ATO period usually covers a 24-hour period. The joint ATO matches specific targets

compiled by the JFACC/JFC staff with the capabilities/forces made available to the JFACC for the given joint ATO day.[12] The ATO cycle is a six phase process which begins with the JFC, in coordination with his components, assessing the progress of the JTF towards accomplishing its assigned missions, continues through the development of a detailed ATO and ends with the assessment of its execution. These six phases are as follows: Phase 1, JFC/Component Coordination; it is during this phase that the JFC consults with his components and asses the progress of the JTF. Feedback, recommendations, estimates of supportability of missions assigned and requests are presented to the JFC by his components. An apportionment of the air effort will usually be made here and is prioritized as it relates to the overall campaign. Phase 2, Target Development; following JFC direction in phase one, the JFACC/JFC staff develop the joint air operations plan to support the JFC's priorities. The end result is the Joint Prioritized Target List (JPTL). Phase 3, Weaponeering/Allocation; target specifics are analyzed and individual aim points and target identification and descriptions are developed. The end result is the Master Air Attack Plan (MAAP) which is the basis for the joint ATO. Phase 4, Joint ATO Development; once the JFACC approves the MAAP the details of the ATO are put together along with the SPINS and the ACO. Phase 5, Force Execution; this is the actual execution of the ATO by all forces assigned, or made available, to the JFACC. Phase 6, Combat Assessment; upon completion of the execution of individual missions, and the entire ATO, target damage assessment is conducted by all levels of the JTF.[13] This provides feedback to the JFACC and JFC as the process begins again. This process is cyclic in nature and there are usually three joint ATOs in the process at any one time once operations start: "(1) the joint ATO in

execution (today's plan), (2) the joint ATO in production (tomorrow's plan), and (3) the joint ATO in planning (the following day's plan)."[14] Figure 3 provides a simplified graphic display of the Joint ATO cycle.

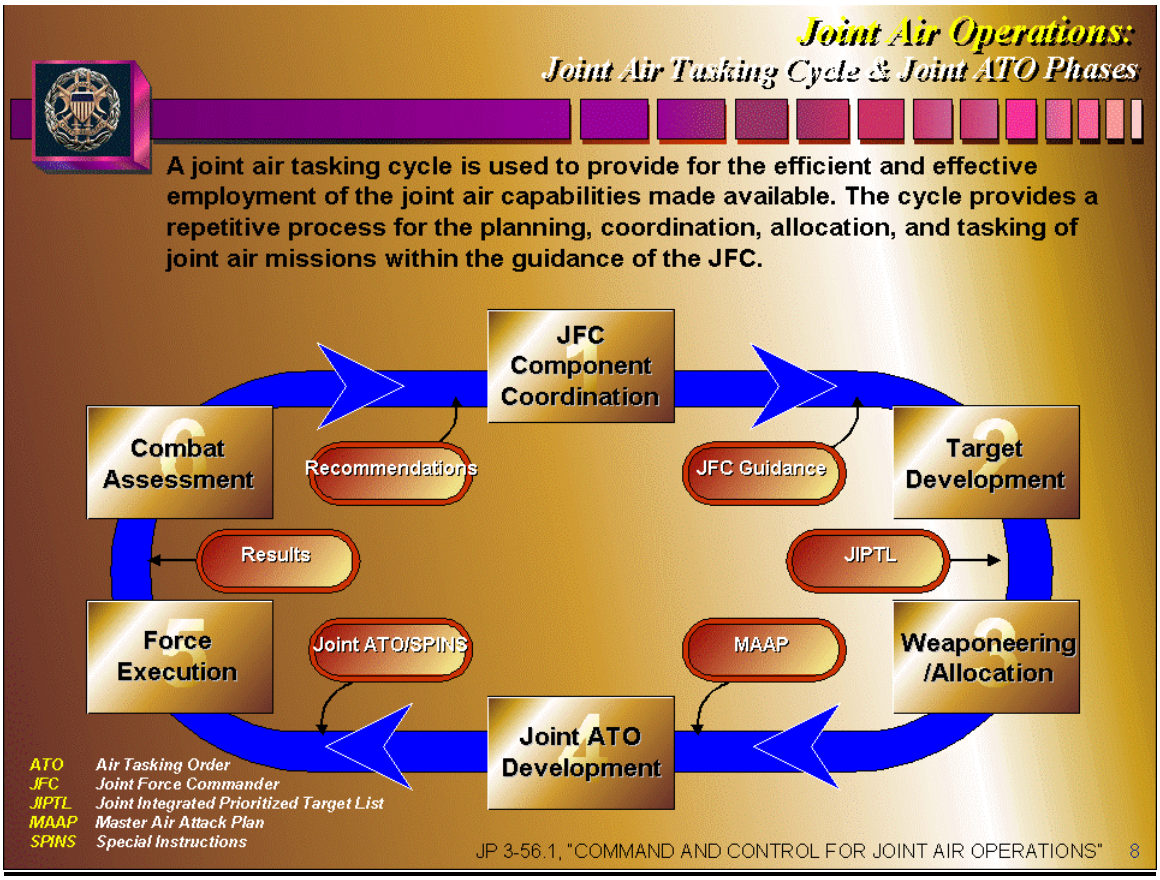

Figure 3. Joint Air Tasking Cycle & Joint ATO Phases
(JFE Briefings CD-ROM Vol 1 No. 1, March 1997, p. 22)

The previous discussion of current Joint Air Command and Control Doctrine as presented in JP 3-56.1 is important to understand as we shift to a discussion how this doctrine has played out in three of the most recent conflicts that the United States has participated in. Specifically, it is holes in this doctrine that have been exposed by combat situations and need to be addressed if our joint force commanders are going to be able to apply airpower in its most efficient and effective form. The following is a discussion of

air operations in three of our most recent conflicts; Operations Desert Shield/Desert Storm, Operation Allied Force and Operation Enduring Freedom – Afghanistan. From the information provided in these case studies an analysis where our current doctrine needs to go and what it needs to address can be conducted.

Analysis of the problem (Three Case Studies):

Operation Desert Shield / Desert Storm (Saudi Arabia/Kuwait/Iraq)

When Iraq invaded Kuwait in 1990, the die was cast for the unveiling of a new concept in American warfare; the coupling of a strategic air campaign with the component commander concept of the JFACC. To the casual observer, this idea and its subsequent execution by United States Central Command (CENTCOM) was a resounding success. At no other time in the history of warfare has airpower been used in such a decisive and devastating manner orchestrated by a cohesive command structure. Facilitated by a comprehensive air campaign, both strategic and tactical, airpower produced the effects that airpower enthusiasts had been preaching since the days of General Billy Mitchell and General Giulio Douhet. "With roughly 1 percent of the bombs dropped in 11 years in Vietnam, allied air assets shut down Iraq's gasoline production, electricity, transportation, communications, offensive-weapons production, and air defenses."[15] Air power divided Iraq from its army in Kuwait which prevented Iraq from communicating, reinforcing or withdrawing its forces.[16] However, not all was as cohesive and seamless as it may have appeared. In 1986, the Goldwater-Nichols Defense Reorganization Act was passed. The intent of this act was to "improve and

rationalize the efficiency of a Rube Goldberg contraption passing for a defense establishment by formalizing new rules that might help the system function with less self-generated friction."[17] This act gave more authority to the Chairman, Joint Chiefs of Staff, the Commanders in Chief (CINCs) (now referred to as Combatant Commanders) of the joint warfighting commands and, of specific import to this paper, provided for the single air commander under the JFACC concept. However, despite being designated as the JFACC, General Horner[18] did not exercise formal command over the aircraft of the Army, Navy and Marine Corps that were deployed to the Gulf. Instead he practiced a form of "control" to the extent that he was authorized by the apportionment decisions made by CINC CENTCOM, General H. Norman Schwarzkopf. This control was exercised through the CENTCOM ATO and facilitated the synchronized operations of the different service and coalition aircraft in theater. However, problems began to arise from the start. For instance, "army helicopters operating below 500 ft were exempted from JFACC jurisdiction, as were naval aircraft during over water flight and Marine aircraft tasked with direct support of Marine ground operations.[19] Coupled with this was a Marine Corps aversion to the idea that its aircraft would not be dedicated solely to supporting the Marine Air-Ground Task Force (MAGTF) and the Navy wanted to conduct operations as a "full service" force. Additionally Army and Air Force disagreements about the Air Land Battle concept continued especially in the area of support to Army ground troops by the Air Force.[20] In addition to service parochialisms in with regards to the joint use of aircraft and how that would affect their individual forces, the ATO itself was a challenge. The concept of the ATO was predominantly an Air Force document and as such they were the owners of the systems that could manipulate, manage and produce and

disseminate the final product. In fact, the Navy had to fly a copy out to its carriers every day and the Marine Corps had similar issues with getting the ATO to its airbases and the aircraft embarked on amphibious shipping. The ATO process was also very time consuming, with the usual ATO cycle taking anywhere from 48-96 hours for production. This, coupled with dissemination issues, made the ATO a necessary, but cumbersome animal. In addition to service disagreements and ATO creation/dissemination problems, there was a lack of Joint Doctrine for the execution of a theater wide operational level air war. Because of the predominantly Air Force make up of the JFACC staff, where Joint Doctrine was lacking, Air Force doctrine was filled in.[21] One specific example of this was how the "command/control" of aviation assets was looked at by the Marines. "The Marines saw themselves as the only truly combined-arms team, integrated across air-ground lines and not across service lines in the air medium. The Air Force, on the other hand, focused on utilization of all tactical air resources in theater and remained adamant on the need for centralized allocation and tasking authority."[22] Despite the differences that were encountered, CENTCOM was able to find ways, under the JFACC concept to facilitate a comprehensive operational level air campaign against Iraq. However, the fundament doctrinal differences were not solved. In much the same way as the Korea and Vietnam examples demonstrated it was only through "marriages of convenience" between the JFACC and the different services that mission accomplishment was achieved.[23] Overall, the Desert Storm air campaign was a success. It effectively set the conditions for the Coalition land offensive that would throw Iraqi forces out of Kuwait; however, the underlying service issues and doctrinal deficiencies have left room for improvement.

Operation Noble Anvil (Serbia / Kosovo)

Following the success of the Desert Storm the use of aircraft as a political tool in and of itself became more and more accepted in the United States government. "Policy by Airpower" would be one way of summing up how responses to crises were being seen in Washington D. C. When Slobodan Milosevic began his ethnic cleansing campaign in the early months of 1999, the United States' response would be led by an administration that had replaced the political team that had thrown Saddam Hussein out of Kuwait eight years earlier. President Clinton and his administration had come to power and with them different perspectives on how to deal with an international crisis had developed. As with the major members of the North Atlantic Treaty Organization (NATO) a concern over casualties had, driven by media influence, become a top concern for policy makers in Washington D. C. With this concern came a need to find an "orderly, discrete, and bloodless military option: the air campaign."[24] From the start of NATO intervention in to the Kosovo crisis, an exclusively airpower response policy adopted. This proved to be a challenge for both NATO doctrine as well as United States Joint Doctrine. For NATO, the problem was one of modernization. As the lessons learned during Operation Desert Storm were being adapted, the system of NATO air control was in the process of transforming from Sector Operations Centers (oriented on defense operations) to Air Tactical Operation Centers (ATOC) (oriented on offensive operations). This process was not completed when NATO's need for an ATOC to facilitate air operations in the Balkans became apparent.[25] For this reason, the Commander of the 5th Allied Tactical Air Force set up what was to be called the Balkan Combined Air Operations Center (CAOC) in order to control and coordinate the daily air operations that were to take place

in support of NATO intervention in Kosovo: soon to be christened Operation Allied Force. However, the organization of the CAOC followed the lines of United States doctrine and was a foreign entity to any recognized NATO structure.[26] Due to NATO and Coalition operations requirements that I will not detail here, the CAOC was driven by necessity to produce two ATOs; one a United States only ATO and the other for both United States and Allied forces. This produced a disjointed effort within the architecture of the overall air war as American forces were conducting missions outside of the visibility of NATO. In much the same way as the ATO process was inflexible in reacting to time sensitive targets in Desert Storm, the ATO process had the same problems during Operation Allied Force. Specifically, "the air tasking order process did not lend itself to ensuring the speed of command needed in a rapidly developing operation environment."[27] Additionally, personnel that went to support the CAOC were not versed in either United States Joint Doctrine or JFACC operations.[28] For the United States this was to play a larger role as operations were made more complex by the various ATO production, management and dissemination systems that were needed to get the ATO to all forces involved in the operation.

For the United States, a severe doctrinal problem was exposed when, due to the inability of fixed wing aviation to "get in low" to take out hidden Serbian forces the United States Army deployed Task Force (TF) Hawk to Albania in order to augment fixed wing air operations and take out targets that were not acquirable from the 15,000 feet. Without detailing the operational problems that TF Hawk encountered in Albania, the doctrinal dispute/differences between the Air Force and Army with regards to rotary wing aircraft employment requires discussion. "The Air Force uses the ATO as their

synchronization document. The Army writes their operational order based on a synchronization matrix to orchestrate in time and space when and what assets will be applied to an operation."[29] From a United States military perspective, the Army and the Air Force were not doctrinally prepared to utilize Army Attack Aviation in joint operations. Since the ATO is the authoritative document for air operations in a joint environment, the JFACC and the Commander for TF Hawk had no command relationship established between them; this prevented any semblance of a coordinated effort.[30] The problem for the USAF and the USA in Kosovo is reflected in the following statement by retired Air Force Colonel Bob Gaskin, who served as head of the USAF's doctrine branch: "The story here is that joint doctrine is a colossal failure, we've been working on joint doctrine for 15 years. Joint air doctrine was envisioned only for the theater war air assets of each service. No one has ever seriously envisioned including army aviation into a theater strategic air campaign, although doing so would be relatively easy if the mindset was there."[31]

Operation Enduring Freedom (Afghanistan)

While Operations Desert Storm and Allied Force provided negative examples of what is wrong with our current doctrine, Operation Enduring Freedom– Afghanistan (OEF - A) is demonstrating that current doctrine has not kept pace with innovation. Advances in technology have dramatically increased air delivered munitions accuracy, utilization of hand held advanced information technologies utilized by forward air control teams and Unmanned Aerial Vehicles (UAV) have demonstrated their ability to provide reliable platforms for sensors with long loiter time that have both targeting finding and target engagement capabilities have all made utilization of airpower more flexible, lethal

and efficient. However, along with these new employment capabilities must come the ability to command and control them in order to best apply their strengths in the accomplishment of the JFC's mission. From its beginning, the air war in Afghanistan was not massive in scale. During the heaviest combat operations, prior to the fall of the Taliban, the sortie count was about half that used in Operation Allied Force and much less than what was used during Operation Desert Storm.[32] "What made OEF unique was that joint airpower was able to respond on command in a harsh, politically complex environment. The airpower component set the conditions for a coalition campaign and achieved success from the first night onward, adapting to tactical constraints and brining precise firepower to bear. Indeed, 80 percent of the targets struck by US airpower were "flex targets" – those given to pilots en route."[33] It is this type of flexibility that our Joint Doctrine must come to grips with and find a way to make the use of airpower that much more relevant to the war fight than it already is. Though joint service interoperability has improved since Kosovo, the flexibility issues with the ATO, and its targeting procedures, still remain. Additionally, as more and more information becomes available within the C2 architecture the chances are becoming very great that the time required within the decision cycle to approve a strike will actually increase instead of decrease. An example follows: "It's kind of ridiculous when you get a live feed from a Predator [UAV] and the Intel guys say, 'We need independent verification.'"[34] This is the type of thing that happened on more than one occasion during OEF-A and will continue to happen in the future.

Of significantly increasing interest to our airmen will be the ability to command and control UAVs in what has been up to this time an are predominately dedicated to "air

breathers." From simple use as reconnaissance assets to actual engagement platforms, UAVs are following the same evolutionary path as have manned aircraft. From the early days of WWI until today, manned aircraft have not had to share a significant portion of their "airspace" with platforms that do not have a guy/or gal with a "call sign" associated with them. The utilization of these new platforms will require a rethink of how they are utilized in the execution of joint air operations, but they will also require a reevaluation and amplification of the one paragraph that they receive in Joint Publication 3-52 "Joint Doctrine for Airspace Control in the Combat Zone." Additionally, the utilization of advanced technologies in the air war will require a military wide review of satellite and advanced communications equipment that will be required to support this type of warfare.

Counter-Argument:

Throughout this paper the "holes" in joint air command and control doctrine have been focused on. But what if there are no holes in our doctrine and we take the approach that Joint Doctrine, the ATO process and individual service philosophy are fine the way they are and that they provide flexibility within the existing structure. If this path of thought is looked into however, there are countless examples that point to its weakness. Operation Desert Storm was very successful at the tactical and operational level, but many issues remained to be solved. ATO dissemination, JFACC structure and manning are just a couple, not to mention the issue with Marine aviation and its ties to the MAGTF and we haven't even mentioned the problem with Army Attack Aviation. The problem with the Army came to a head when TF Hawk was unable to accomplish the tasks that were assigned to it during Operation Allied Force. Operation Enduring Freedom – Afghanistan was also a tactical success for airpower, but the weaknesses in air C2

threaten to take some of the effectiveness of airpower away as the process cycles for ATO creation and target approval lag behind the capabilities of our systems. It would be a grave disservice to our men and women in uniform, and to the country, to accept that Joint Doctrine for Air Command and Control is fine the way it is.

Proposals to fix the problem:

There are three major areas that require specific attention in order to make Joint Air Command and Control Doctrine truly joint. Each will be addressed below in turn.

- Service Biases. It is in this area that the Joint Staff and Defense Department need to take the lead. Specifically, each service must learn to better operate within the joint arena. In order to accomplish this, a more thorough understanding of the capabilities and limitations of each service must become resident knowledge within the fellow services. Specifically, the Air Force must come to understand the vital organic nature of Marine Aviation to the MAGTF. Conversely, the Marine Corps' appreciation of Air Force doctrine of strategic attack must also be understood and appreciated for its theater wide implications. The USA must learn how to work their attack aviation into the accepted JFACC concept and ATO process. For the USN, they too must learn that the concept of a strategic air campaign does not just encompass airspace over land. All of this can be accomplished with greater influence on developing the Joint Professional Military Education system as well as a renewed effort on the part of the Chairman of the Joint Chiefs of Staff (CJCS) to facilitate a top down understanding of integral part that each service plays and to eliminate parochial fears.

- Adjusted Training Practices for the Services. This again falls in the lap of the

CJCS. Joint training and the establishment of common training for common specialties within the services is a must. In the Federal Aviation Association (FAA) the qualification for an air traffic controller Boston's Logan International Airport is the same as the qualification for an air traffic controller at Los Angeles International Airport. We have got to do the same thing with in the services. Training to a Joint standard, not simply a Service standard is the key to continuity in joint operations. This can be accomplished while still maintaining the unique capabilities within the services. However, a concerted effort from the Chairman on down is a must. Additionally, United States Joint Forces Command needs to ensure that this training becomes institutionalized within the Department of Defense. This will require the additional requirement for oversight in the development and procurement of aviation specific technologies so that each service will truly be a Joint capable force.

- Adjustment in Joint Doctrine. "The flaw in joint doctrine is more than our inability to harmonize plans and operations; it also is our failure to develop a national philosophy of war that would lead to a comprehensive doctrine. A truly joint doctrine would include a basic understanding of war (somewhat like the Marine Corps' FMFM-1, Warfighting), and from that bedrock document would flow all joint procedures."[35] Just as this is true for Joint Doctrine as a whole, it is especially true for aviation. With the adoption of the JFACC concept, the coordination of the aviation assets of all services has become more critical than ever. Additionally, as defense budgets get smaller and United States military commitments become more and more frequent, the ability to seamlessly integrate our multi-service aviation assets becomes more and more critical. When you add the dimension of working within an alliance framework, such as NATO, or within a

coalition, such as we find ourselves in Afghanistan and Iraq, the requirement to have our own doctrine based on a firm foundation becomes all the more important.

Conclusion:

"Reliance on air power has set the American way of war apart from all others for well over half a century. Other countries might field doughty infantry, canny submariners or scientific artillerists comparable in skill and numbers to America's. Only the United States, however, has engaged in a single-minded and successful quest for air superiority in every conflict it has fought since World War I. Air warfare remains distinctively American—High-tech, cheap in lives and (at least in theory) quick."[36] This quote sums up America's military love affair with the airplane, but it does not tell the entire story. Just as we have wedded ourselves to the beauty, flexibility and political acceptability of the use of airpower to wage war, we have committed ourselves to continue to be the world's leaders in its application. This requires a tireless and detailed analysis of whether or not our doctrine is both functional and operationally sound.

The deciding factor on whether or not our Joint Air Command and Control doctrine is up to the task of allowing us to operate as a joint force is the answer to the following question. Can the Joint Force Commander utilize his joint airpower to effectively assist him in the accomplishment of his assigned mission? Currently the answer to this is no. As such the United States Military must address this problem before our country, or our allies, are faced with an adversary that can exploit the holes in our doctrine.

"The lesson from the last war that stands out clearly above all the others is that if you want to go anywhere in modern war, in the air on the sea, on the land, you must

have command of the air. –Fleet Admiral William F. Halsey to Congress after World War II."

NOTES

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[3] JP 3-56.1, Command and Control for Joint Air Operations, 14 Nov 1994, p. I-4.

[4] Ibid. p. viii.

[5] Ibid.

[6] Ibid. p. v.

[7] Ibid. p. vi.

[8] Ibid. p. vi.

[9] Ibid. p. vii.

[10] Ibid. p. II-2.

[11] Ibid. pp. ix-xi.

[12] Ibid. p. xi.

[13] Ibid. pp. xi-xii and IV-6 - IV-11.

[14] Ibid. p. IV-5.

[15] Rice, Donald B. "Air Power in the New Security Environment." In *The Future of Air Power in the Aftermath of the Gulf War*, ed. Richard H. Shultz, Jr. and Robert L. Pfaltzgraff, Jr. , 11-12. Maxwell Air Force Base, Alabama: Air University Press, 1992.

[16] Ibid. p. 12.

[17] Lambeth, Benjamin S. The Transformation of American Air Power. Ithaca, New York: Cornell University Press, 2000. p. 109.

[18] Lieutenant General Charles A. Horner was designated as the JFACC by CINC, CENTCOM, General H. Norman Schwarzkopf.

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[20] Winnefeld, James A. and Dana J. Johnson. "Unity of Control: Joint Air Operations in the Gulf." Joint Force Quarterly (Summer 1993): pp. 88-99.

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[22] Ibid. p. 96.

[23] Ibid. p. 96.

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[27] United States General Accounting Office. Kosovo Air Operations: Need to Maintain Alliance Cohesion Resulted in Doctrinal Departures. Washington D. C.: United States General Accounting Office, July 2001. p. 28.

[28] Pitts, Larry (LTC, USA). Joint Doctrine in a Combined Operations World: The JFACC. National Defense University, National War College. 2000. pp. 9-10.

[29] Atkinson, David and Hunter Keeter. "Apache Role in Kosovo Illustrates Cracks in Joint Doctrine." Defense Daily Vol. 202, Iss. 40 (May 26, 1999): PROQUEST p. 2.

[30] Holmes, Sharon L. (Maj, USAF). Army Attack Aviation and Joint Air Operations: Doctrinal and Institutional Barriers. School of Advance Military Studies, United States Army Command and General Staff College, Fort Leavenworth, Kansas. 2000. p. 3.

[31] Atkinson, David and Hunter Keeter. "Apache Role in Kosovo Illustrates Cracks in Joint Doctrine." Defense Daily Vol. 202, Iss. 40 (May 26, 1999): PROQUEST pp. 1 and 3.

[32] Grant, Rebecca. "An Air War Like No Other." Air Force Magazine (November 2002): p. 30.

[33] Ibid. p. 30.

[34] Ibid. p. 34.

[35] Szelowski, David W. "Disjointed: Just How Joint Are We?" United States Naval Institute. Proceedings. Vol. 126, Iss. 9 (Sep 2000): PROQUEST p. 3 and 4.

[36] Cohen, Eliot A. "The Mystique of U. S. Air Power." Foreign Affairs. Vol. 73, Iss. 1 (Jan/Feb 1994): PROQUEST p. 5.

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